

SEQUENCE LISTING

<110> Joelle Thonnard

<120> Novel Compounds

<130> BM45417

<150> 9923156.5

<151> 1999-09-30

<160> 13

<170> FastSEQ for Windows Version 4.0

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<211> 5019

<212> DNA

<213> Moraxella catarrhalis

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<213> *Moraxella catarrhalis*

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Pro	Arg	Leu	Ser	Ile	Glu	Gly	Glu	Lys	Gln	Ile	Glu	Gly	Gln	Thr	Val	1505	1510	1515
Gly	Val	Arg	Ile	Arg	Gly	Thr	Ala	Ser	Asn	Pro	Asn	Ile	Thr	Val	Phe	1525	1530	1535
Asn	Asp	Ala	Gly	Leu	Asp	Glu	Tyr	Gln	Ala	Met	Asn	Ala	Leu	Val	Thr	1540	1545	1550
Gly	Arg	Ile	Ser	Glu	Ser	Ser	Asp	Leu	Gly	Ile	Thr	Glu	Gln	Gly	Phe	1555	1560	1565
Arg	Ser	Gln	Val	Thr	Asn	His	Leu	Ala	Ala	Ala	Gly	Leu	Ser	Leu	Gly	1570	1575	1580
Leu	Ser	Gly	Thr	Arg	Asp	Leu	Thr	Asn	Gln	Ile	Gly	His	Ala	Phe	Gly	1585	1590	1595
Phe	Gln	Ser	Leu	Thr	Ile	Asp	Ala	Ser	Gly	Ser	Ser	Asp	Asp	Thr	Asn	1605	1610	1615
Val	Asn	Val	Thr	Gly	Tyr	Ile	Thr	Pro	Asp	Leu	Tyr	Leu	Arg	Tyr	Gly	1620	1625	1630
Val	Gly	Val	Phe	Asn	Ala	Glu	Ser	Thr	Leu	Ser	Met	Arg	Tyr	Gln	Leu	1635	1640	1645

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<213> Moraxella catarrhalis

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Asp	Ile	Ser	Gln	Gly	Ala	Ala	Trp	Gln	Leu	Glu	Ala	Asp	Met	Asn	Ser	125
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Asp	His	Ile	Leu	Ser	Ile	Ser	Thr	Lys	Ser	Gly	Asp	Ile	Glu	Ala	Ser	355	360	365
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Arg	Gln	Pro	Thr	Glu	Phe	Ser	Tyr	Gly	Leu	Asp	Asp	Asn	Ser	Leu	Gln	405	410	415
Ile	Ala	Ala	His	Cys	Trp	Gln	Ser	Ala	His	Ile	Gln	Gly	Asp	Gly	Val	420	425	430
Gly	Ala	Ile	Cys	Leu	Gln	Asp	Thr	Leu	Ser	Tyr	Thr	Pro	Gln	Ser	Gly	435	440	445
Asn	Val	Asn	Leu	Ile	Ile	Gln	Asn	Leu	Asp	Thr	Gln	Val	Leu	Leu	Ala	450	455	460
Ala	Leu	Pro	Ser	Asp	Ile	His	Trp	Lys	Ser	Met	Leu	Asn	Gly	Arg	Ile	465	470	475
Lys	Ala	Met	Trp	Gln	Ala	Gly	Gln	Ser	Pro	Leu	Val	Asp	Ala	Val	Leu	485	490	495
Tyr	Ser	Asp	Asp	Gly	Thr	Ile	Gly	Leu	Thr	Gln	Glu	Glu	Thr	Gly	Tyr	500	505	510
Ile	Glu	Met	Pro	Tyr	Gln	Arg	Ala	Ser	Val	Ile	Ala	Lys	Ser	Val	Asp	515	520	525
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Tyr	Ala	Asp	Val	Ile	Ile	Asn	Pro	Lys	Gln	Thr	Asp	Lys	Pro	Ile	Ser	545	550	555
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Phe	Pro	Ser	Ile	Gln	Thr	Leu	Ser	Gly	Lys	Val	Ser	Leu	Ala	Gly	Gly	580	585	590
Leu	Gly	Gly	Thr	Leu	Ser	Lys	Pro	Leu	Phe	Tyr	Gly	Asn	Ala	Asn	Leu	595	600	605
Lys	Asn	Gly	Ala	Leu	Ala	Ile	Val	Gly	Val	Pro	Met	Pro	Ile	Ser	Asp	610	615	620
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Arg	Phe	Met	Gly	Gly	Glu	Gly	His	Gly	Val	Leu	Tyr	Gly	Glu	Met	Asp	645	650	655
Trp	Ala	Glu	Glu	Leu	Tyr	Ala	Arg	Leu	Gly	Val	Phe	Gly	Glu	Asn	Leu	660	665	670
Thr	Val	Ser	Gln	Pro	Pro	Leu	Val	Thr	Ala	Gln	Ile	Ser	Pro	Glu	Leu	675	680	685
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Val	Ser	Ile	Pro	Ser	Ala	Thr	Ile	Arg	Pro	Pro	Glu	Ala	Thr	Ala	Asp	705	710	715
Ile	Val	Thr	Glu	Ser	Pro	Asp	Val	Ser	Val	Ile	Asp	Arg	Arg	Ile	Thr	725	730	735
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Lys	Ile	Asp	Val	Ile	Gly	Gln	Asn	Leu	Asp	Leu	Asn	Tyr	Ala	Gln	Ile
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Arg	Phe	Asp	Gly	Asp	Met	Leu	Asn	Pro	Arg	Leu	Ser	Ile	Glu	Gly	Glu
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Lys	Gln	Ile	Glu	Gly	Gln	Thr	Val	Gly	Val	Arg	Ile	Arg	Gly	Thr	Ala
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Ser	Asn	Pro	Asn	Ile	Thr	Val	Phe	Asn	Asp	Ala	Gly	Leu	Asp	Glu	Tyr
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		915					920						925		
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Pro	Asp	Leu	Tyr	Leu	Arg	Tyr	Gly	Val	Gly	Val	Phe	Asn	Ala	Glu	Ser
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Thr	Leu	Ser	Met	Arg	Tyr	Gln	Leu	Thr	Arg	Arg	Val	Tyr	Ile	Glu	Ala
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22

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